

**Bachelor of Science with Major in Mathematics  
Concentration in Business Applications  
(For Students entering in Fall 2009)**

<b>Freshman Year / Fall Semester</b>	<b>Cr.</b>	<b>Freshman Year / Spring Semester</b>	<b>Cr.</b>
___ 92.131 Calculus I	4	___ 92.132 Calculus II	4
___ . ___ Free Elective	3	___ 92.321 Discrete Structures I (see note p. 2)	3
___ . ___ Science	3	___ . ___ Science	3
___ . ___ Science Lab	1	___ . ___ Science Lab	1
___ 42.101 (Gen Ed) College Writing I	<u>3</u>	___ 42.102 (Gen Ed) College Writing II	<u>3</u>
	<b>14</b>		<b>14</b>
<b>Sophomore Year / Fall Semester</b>	<b>Cr.</b>	<b>Sophomore Year / Spring Semester</b>	<b>Cr.</b>
___ 92.231 Calculus III	4	___ 92.234/236 Differential Equations	3
___ 92.221 Linear Algebra I	3	___ 92.222 Linear Algebra II	3
___ . ___ Science	3	___ . ___ Science	3
___ . ___ Science Lab	1	___ . ___ Science Lab	1
___ 42.229 Writing Requirement	3	___ . ___ (Gen Ed) AH	3
	<u>3</u>	___ . ___ (Gen Ed) SS	<u>3</u>
	<b>14</b>		<b>16</b>
<b>Junior Year / Fall Semester</b>	<b>Cr.</b>	<b>Junior Year / Spring Semester</b>	<b>Cr.</b>
___ 92. ___ Analysis Elective	3	___ 92. ___ Analysis Elective	3
___ 92. ___ Prob/Statistics Elective	3	___ 92.3/400 Math Elective	3
___ . ___ (Gen Ed) AH	3	___ 49.202 Economics II	3
___ . ___ (Gen Ed) SS	3	___ . ___ (Gen Ed) AH	3
___ 49.201 Economics I	<u>3</u>	___ . ___ (Gen. Ed) SS	3
	<b>15</b>	___ 92.375 Senior Seminar I	<u>1</u>
			<b>16</b>
<b>Senior Year / Fall Semester</b>	<b>Cr.</b>	<b>Senior Year / Spring Semester</b>	<b>Cr.</b>
___ 92. ___ Math Elective	3	___ 92. ___ Math Elective	3
___ . ___ Science Elective	3	___ . ___ Concentration Elective	3
___ . ___ Computing requirement	3	___ . ___ Science Elective	3
___ 92.475 Senior Seminar II	3	___ . ___ Science Elective	3
___ . ___ Free Elective	<u>3</u>	___ . ___ Science Elective	<u>3</u>
	<b>15</b>		<b>15</b>

**Minimum total credits for graduation = 120**

Consult the *Schedule of Classes* booklet regarding General Education (Gen. Ed.) requirements.

Course selections are subject to restrictions. See reverse side for additional information.

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**Mathematics Requirements (92.xxx)**

Calculus:	131,132 and 231
Linear Algebra:	221and 222
Differential Equations:	one of 234, 236
Discrete Structures:	321 and 322
Analysis I:	one of 305,411,501,503
Analysis II:	One of 301, 305, 306, 411, 412, 413, 420, 421, 442, 450
Probability & Statistics:	One of 385, 386, 486
Senior Seminar:	375 and 475
Math Electives:	One mathematics courses at the 300 level or higher (except 363)
Concentration Requirements:	362

**Note:** None of the above courses can be used to satisfy two different requirements.  
305 and 503 cannot both be used to satisfy the two-courses Analysis requirement.

The following courses cannot be used as Electives:

Quantities Reasoning 111; Management Precalculus 121; Management Calculus122  
Preparation for Calculus 127; Explorations in Math 151; Introduction to Statistics 283; Intro  
to Data Analysis 363.

No more than 60 Math credits can be counted toward the degree.

**Writing Requirement:** 42.229 (Essay Writing for Non-English Majors). If a student has completed other courses with substantial writing requirements, he/she can petition to have that work satisfy the mathematics writing requirement.

Students with a joint major in Computer Science should take 42.220 (Oral and Written Communication for CS Majors) rather than 42.229.

**General Education Electives** must include at least 6 courses:

3 in Arts & Humanities (AH) and 3 in Social Sciences (SS); one course must satisfy the Diversity (D) requirement and one the Ethics (E) requirement. No more than two courses from a single department can be used to satisfy these Gen Ed requirements.

Math/Science Gen Ed requirements are fulfilled by the major's courses.

**Advice to Students:** If you plan any deviations from this sample program of study, use an Academic Petition signed by the Mathematics Department Chair to receive written permission. Keep a copy of any signed Academic Petitions for your own files.

**Bachelor of Science Requirements:** A minimum of 74 credits and 20 courses from the Offerings of science and mathematics; four science lecture courses with corequisite labs, including a two semester sequence in a department other than Mathematics—91.101(Computing I), 91.102 (Computing II), 92.231/232 (Calculus III & Math Lab I) and 92.236 (Engineering Diff.Eqns) qualify.